

Sequence Listing

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Tyr Pro His Tyr Tyr Val Asn Glu Arg Lys Ser His Trp Tyr Phe
1 5 10 15

Asp Val
17

<210> 86
<211> 17
<212> PRT
<213> artificial sequence

<220>
<221> artificial
<222> 1-17
<223> variant CDR sequence

<400> 86
Tyr Pro His Tyr Tyr Leu Thr Asp His Lys Ser His Trp Tyr Phe
1 5 10 15

Asp Val
17

<210> 87
<211> 18
<212> PRT
<213> artificial sequence

<220>
<221> artificial
<222> 1-18
<223> variant CDR sequence

<400> 87
Tyr Pro His Tyr Tyr Leu Lys Asp Gly Lys Lys Ser His Trp Tyr
1 5 10 15

Phe Asp Val
18

<210> 88
<211> 17
<212> PRT
<213> artificial sequence

<220>
<221> artificial
<222> 1-17
<223> variant CDR sequence

<400> 88
Tyr Pro His Tyr Tyr Arg Arg Asp Lys Lys Ser His Trp Tyr Phe
1 5 10 15

Asp Val
17

<210> 89
<211> 17
<212> PRT
<213> artificial sequence

<220>
<221> artificial
<222> 1-17
<223> variant CDR sequence

<400> 89
Tyr Pro His Tyr Tyr Leu Lys Asp Lys Lys Ser His Trp Tyr Phe
1 5 10 15

Asp Val
17

<210> 90
<211> 17
<212> PRT
<213> artificial sequence

<220>
<221> artificial
<222> 1-17
<223> variant CDR sequence

<400> 90
Tyr Pro His Tyr Tyr Leu His Asp Arg Lys Ser His Trp Tyr Phe
1 5 10 15

Asp Val
17

<210> 91
<211> 17
<212> PRT
<213> artificial sequence

<220>
<221> artificial
<222> 1-17
<223> variant CDR sequence

<400> 91
Tyr Pro His Tyr Tyr Leu Ser Asp Lys Lys Ser His Trp Tyr Phe
1 5 10 15

Asp Val
17

<210> 92
<211> 17
<212> PRT
<213> artificial sequence

<220>
<221> artificial
<222> 1-17
<223> variant CDR sequence

<400> 92
Tyr Pro His Tyr Tyr Val Asn Glu Arg Lys Ser His Trp Tyr Phe
1 5 10 15

Asp Val
17

<210> 93
<211> 45
<212> DNA
<213> artificial sequence

<220>
<221> artificial
<222> 1-45
<223> mutagenesis oligo

<400> 93
tacccgcact attatgtgaa cgagcggaaag agccactgggt atttc 45

<210> 94
<211> 110
<212> PRT
<213> artificial sequence

<220>
<221> artificial
<222> 1-110
<223> humanized antibody light chain variable domain

<400> 94
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
1 5 10 15

Gly Asp Arg Val Thr Ile Thr Cys Ser Ala Ser Gln Asp Ile Ser
20 25 30

Asn Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys
35 40 45

Val Leu Ile Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Ser
50 55 60

Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
65 70 75

Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln
80 85 90

Tyr Ser Thr Val Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu
95 100 105

Ile Lys Arg Thr Val
110

<210> 95
<211> 110
<212> PRT
<213> artificial sequence

<220>
<221> artificial
<222> 1-110
<223> humanized antibody light chain variable domain

<400> 95
Asp Ile Gln Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val
1 5 10 15
Gly Asp Arg Val Thr Ile Thr Cys Arg Ala Asn Glu Gln Leu Ser
20 25 30
Asn Tyr Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys
35 40 45
Val Leu Ile Tyr Phe Thr Ser Ser Leu His Ser Gly Val Pro Ser
50 55 60
Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
65 70 75
Ser Ser Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln
80 85 90
Tyr Ser Thr Val Pro Trp Thr Phe Gly Gln Gly Thr Lys Val Glu
95 100 105
Ile Lys Arg Thr Val
110

<210> 96
<211> 118
<212> PRT
<213> artificial sequence

<220>
<221> artificial
<222> 1-118
<223> humanized antibody heavy chain variable domain

<400> 96
Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly
1 5 10 15
Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr
20 25 30
Asn Tyr Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
35 40 45
Glu Trp Val Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr
50 55 60
Ala Ala Asp Phe Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser
65 70 75
Lys Ser Thr Ala Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp
80 85 90
Thr Ala Val Tyr Tyr Cys Ala Lys Tyr Pro His Tyr Tyr Gly Ser
95 100 105

Ser His Trp Tyr Phe Asp Val Trp Gly Gln Gly Thr Leu
110 115 118

<210> 97

<211> 118

<212> PRT

<213> artificial sequence

<220>

<221> artificial

<222> 1-118

<223> humanized antibody heavy chain variable domain

<400> 97

Glu Val Gln Leu Val Glu Ser Gly Gly Leu Val Gln Pro Gly
1 5 10 15

Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Thr
20 25 30

His Tyr Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
35 40 45

Glu Trp Val Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr
50 55 60

Ala Ala Asp Phe Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser
65 70 75

Lys Ser Thr Ala Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp
80 85 90

Thr Ala Val Tyr Tyr Cys Ala Lys Tyr Pro His Tyr Tyr Gly Ser
95 100 105

Ser His Trp Tyr Phe Asp Val Trp Gly Gln Gly Thr Leu
110 115 118

<210> 98

<211> 121

<212> PRT

<213> artificial sequence

<220>

<221> artificial

<222> 1-121

<223> humanized antibody heavy chain variable domain

<400> 98

Glu Val Gln Leu Val Glu Ser Gly Gly Leu Val Gln Pro Gly
1 5 10 15

Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Thr Phe Thr
20 25 30

Asn Tyr Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
35 40 45

Glu Trp Val Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr
50 55 60

Ala Ala Asp Phe Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser
65 70 75

Lys Ser Thr Ala Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp
80 85 90

Thr Ala Val Tyr Tyr Cys Ala Lys Tyr Pro His Tyr Tyr Val Asn
95 100 105

Glu Arg Lys Ser His Trp Tyr Phe Asp Val Trp Gly Gln Gly Thr
110 115 120

Leu
121

<210> 99

<211> 121

<212> PRT

<213> artificial sequence

<220>

<221> artificial

<222> 1-121

<223> humanized antibody heavy chain variable domain

<400> 99

Glu Val Gln Leu Val Glu Ser Gly Gly Leu Val Gln Pro Gly
1 5 10 15

Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Tyr Asp Phe Thr
20 25 30

His Tyr Gly Met Asn Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
35 40 45

Glu Trp Val Gly Trp Ile Asn Thr Tyr Thr Gly Glu Pro Thr Tyr
50 55 60

Ala Ala Asp Phe Lys Arg Arg Phe Thr Phe Ser Leu Asp Thr Ser
65 70 75

Lys Ser Thr Ala Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp
80 85 90

Thr Ala Val Tyr Tyr Cys Ala Lys Tyr Pro His Tyr Tyr Val Asn
95 100 105

Glu Arg Lys Ser His Trp Tyr Phe Asp Val Trp Gly Gln Gly Thr
110 115 120

Leu
121